

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 6, 2004

TO: Internal File

FROM: David Darby, Reclamation Specialist/Hydrologist

RE: Phase I Bond Release Application, Plateau Mining Corporation, Star Point Mine, C/007/006, Task ID #1768

SUMMARY:

Plateau Mining Corporation submitted a proposal for Phase 1 Bond release on November 10, 2003. The mining operations were completed at the Star Point Mine in 2000-2001. Contemporaneous reclamation took place in Mud Water Canyon and Corner Canyon. Then reclamation continued at the Number 1 Mine. The unit train loadout was demolished in 2001. Other mine facilities including the Lions Deck and office area were demolished in 2001-2002. Re-contouring began at the sites immediately after demolition.

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TECHNICAL ANALYSIS:

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The applicant has submitted plans identifying the reclamation process of the Star Point Mine. Reclamation of the Refuse Pile topsoil borrow and subsoil sites are superseded with the information presented in the Sunnyside Cogeneration Associations' mining permit approved in November 2003.

Reclamation of the Star Point Mine facilities pertains to several area which are identified on Table 542.200a. These sites include portal areas, loadouts, roads, building areas and ponds.

A reclamation timetable is provided in section 542.100 (including Table 542.100a) of the MRP identifying the location and sequence of mining.

Some information regarding removal of the sedimentation ponds associated with the Star Point Mines is also provided in Section 542.200.

Findings:

Table 542.100a should include footnotes identifying which surface structures are being reclaimed by SCA.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

The applicant provides information showing natural drainages will be re-established. Some culverts will be retained for long-term stability of County Road 290. Sedimentation controls will be maintained through the reclamation phase and the site vegetated to prevent downstream loading of sediments to fisheries.

Findings:

The information provided by the applicant is sufficient to address the hydrologic concerns of the Protection of Fish and Wildlife and Related Environmental Values section of the Reclamation Regulations.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

At reclamation, all sedimentation ponds will be removed and the land surface restored to approximate original contour, except those transferred to SCA. All stream channels will be restored to transmit the calculated flows.

Findings:

The information provided by the applicant is sufficient to address the hydrologic concerns of the Approximate Original Contour Restoration section of the Reclamation Regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

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Analysis:

Hydrologic Reclamation Plan

All wells within the permit area have been sealed to prevent acid or other toxic contamination of ground or surface water, to minimize disturbance to the hydrologic balance and to ensure safety of people, livestock, fish and wildlife. Method of sealing wells is provided in Section 551 of the MRP.

The water monitoring plan has been reduced from operational schedule, because some sites are not necessary any more and some UPDES sites have been taken over by SCA for their operation. Water monitoring of reclamation sites will continue until the site is released.

Analysis:

The applicant

Ground-water, surface-water monitoring

Post mining water monitoring is being conducted in accordance with Exhibit 728h. The Star Point Mine.

Transfer of wells

No wells have been or will be transferred.

Discharges into an underground mine

There is not any surface discharges into the mine.

Gravity discharges

There are no gravity discharges from the mine.

Water quality standards and effluent limitations

The water monitoring plan has been reduced from operational schedule. The operator previously submitted requests accompanied by explanations why some sites did not need to be monitored for the reclamation period. The reclamation surface monitoring schedule is described in Section 731.221. The reclamation monitoring schedule for spring, streams and wells is shown in Table 731.211a. Some UPDES sites have been taken over by SCA for their operation. The operator is still submitting UPDES reports for discharge sites to the Division of Water Quality,

even though the ponds have been removed. The DWQ requires that the bond be released before monitoring of ceases. Monitoring of all reclamation sites shown in Table 731.211a will continue until the site is released. Water monitoring data is being collected and submitted to the UDOGM water quality database.

The applicant has designed and reconstructed the drainage area to transmit runoff from storm sizes specified in the regulations. Disturbed areas have been gouged to retain sediment on site.

Diversions

Watersheds have been reestablished in the minesite areas. Designs for reclamation channels and culverts (approved for post mining land use are designed for the County road and access road for natural gas wells) are shown in Exhibit 761a, b and c. As-built channel calculations to demonstrate that the constructed reclamation channels can transmit the peak flow generated by the 10yr-24hr design storm for standard channels and by the 100yr-6hr for the culverted channels are provided in the Reclamation Section 761, Volume II and Exhibit 761a, b and c. Plans and maps identify the channel sections and methods of channel protection to provide stability of the channel and prevent erosion.

Sediment control measures

No sedimentation ponds or siltation structures are planned for the permit area. All sediment ponds on the minesite, except those transferred to SCA, have been removed in accordance with reclamation plan.

Siltation structures

Gouging (or pocking of the surface by excavators) is the only siltation controls features on the permit area. There are no ponds, berms or silt fences to maintain or reclaim.

Sedimentation ponds

All sedimentation ponds have been removed from the permit area.

Other treatment facilities

All of the disturbed areas have been gouged to retain runoff and reseeded to establish plant growth. The applicant proposes that the combination of these treatment measures will control runoff and reduce sediment yield.

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Exemptions for siltation structures

No exemptions for siltation structures have been proposed.

Discharge structures

All sedimentation ponds have been removed, regraded and their sites gouged and reseeded.

Impoundments

No impoundments will be left on the Star Point facilities site.

Casing and sealing of wells

All wells within the permit area have been sealed to prevent acid or other toxic contamination of ground or surface water, to minimize disturbance to the hydrologic balance and to ensure safety of people, livestock, fish and wildlife. Method of sealing wells is provided in Section 551 and Exhibit 724.200a of the MRP.

Findings:

The information provided by the applicant is sufficient to address the hydrologic concerns of the Hydrologic Information section of the Reclamation Regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected Area Boundary Maps

The affected area is shown in Exhibits 761a, b and c

Reclamation Backfilling And Grading Maps

As-built reclamation watersheds are identified in Exhibits 761c. Channel designs maps are channel designs for the mine permit area are also shown on these maps.

Reclamation Facilities Maps

There will be no facilities left on the minesite.

Final Surface Configuration Maps

Final surface configuration is shown in Exhibits 761a, b and c

Reclamation Monitoring And Sampling Location Maps

Reclamation monitoring is shown in the monitoring plan in

Findings:

The information provided by the applicant is sufficient to address the Maps, Plans and Cross-sections Section of the Reclamation Regulations.

RECOMMENDATIONS:

It is recommended that the Division approve the hydrologic portion Phase 1 Bond release application.